

Amendments to the Claims:

Claims 1 -6 (canceled)

7. (withdrawn) The hydrophilic polypeptide of *Eimeria* comprising an amino acid sequence that shares at least 70% homology with a sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5 and SEQ ID NO:6.

8. (withdrawn) A hydrophilic polypeptide of *Eimeria tenella*, comprising an amino acid sequence that shares at least 70% homology with a sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5 and SEQ ID NO:6.

9. (withdrawn) An isolated DNA fragment comprising a nucleotide sequence encoding a hydrophilic polypeptide or an immunogenic fragment of said polypeptide according to claim 7.

10. (withdrawn) The DNA fragment according to claim 9, which comprises a nucleic acid sequence as depicted in SEQ ID NO: 39 or a fragment thereof.

11. (withdrawn) The DNA fragment according to claim 9, which comprises a nucleic acid sequence as depicted in SEQ ID NO: 40 or a fragment thereof.

12. (withdrawn) The DNA fragment according to claim 9, which comprises a nucleic acid sequence as depicted in SEQ ID NO: 41 or a fragment thereof.
13. (withdrawn) A recombinant DNA molecule comprising a DNA fragment according to claim 9.
14. (withdrawn) A live recombinant carrier comprising a DNA fragment according to claim 9.
15. (withdrawn) A host cell comprising a DNA fragment according to claim 9.
16. (currently amended) A vaccine for the protection of poultry against *Eimeria* infection, comprising ~~at least one immunogen selected from the group consisting of~~
a the hydrophilic polypeptide ~~comprising an amino acid sequence that shows at least 70% homology with the sequence of SEQ ID No:3~~
and a pharmaceutically acceptable carrier.
17. (previously presented) The vaccine according to claim 16, which additionally comprises an adjuvant.
18. (previously presented) The vaccine according to claim 16, which comprises at least one

additional immunogen of a poultry pathogen.

19. (previously presented) The vaccine according to claim 18, wherein the at least one poultry pathogen is selected from the group consisting of Marek's Disease virus (MDV), Newcastle Disease virus (MDV), Infectious Bronchitis virus (IBV), Chicken Anaemia Agent (CAA), Reovirus, Avian Retrovirus, Fowl Adenovirus, Turkey Rhinotracheitis virus, *Salmonella* spp. and *E. coli*.

20. (previously presented) The vaccine according to claim 16 which is in freeze-dried form.

21. (withdrawn) An antibody raised against a polypeptide according to claim 7.

22. (withdrawn) A method for the preparation of antibodies against a polypeptide according to claim 3, which comprises administering said polypeptide to a suitable animal.

23. (canceled)

24. (withdrawn) A method for the preparation of a vaccine for combatting *Eimeria* infections, comprising admixing antibodies according to claim 21 with a pharmaceutically acceptable carrier.

25. (withdrawn) A method for the detection of *Eimeria* parasites in poultry, comprising incubating a DNA preparation from the poultry with a DNA fragment according to claim 9, whereby the detection of hybrids is indicative of the presence of *Eimeria* in the DNA preparation.
26. (withdrawn) A method for the detection of antibodies against *Eimeria* parasites in poultry serum, comprising incubating said serum with the hydrophilic polypeptide according to claim 7, whereby the formation of a complex between the polypeptide and antibodies in the serum indicates a positive result.
27. (withdrawn) A live recombinant carrier comprising a recombinant DNA molecule according to claim 13.
28. (withdrawn) A host cell comprising a recombinant DNA molecule according to claim 13.
29. (withdrawn) A host cell comprising a live recombinant carrier according to claim 14.